



# THE WATCHKEEPER

Keeping an eye on what's  
ahead in maritime.

— The Future of Maritime, Built Around You

# From the Deck:

Welcome to the second edition of our newsletter.

At Mizzen Digital, we take pride in driving innovation and delivering impactful solutions in the maritime software space. Our recent milestones underscore the strength of our dedicated team and our commitment to excellence. As we continue to evolve and expand, we remain focused on helping our clients navigate their unique challenges with confidence and agility. We invite you to explore how our expertise, collaboration, and passion can empower your business to achieve new heights.

Together, we can chart a course for success in an ever-changing industry.

**Rohan Yajurvedi**  
**Chief of Staff, Mizzen Digital**



# Maritime Market Snapshot

## Smart Ports and Supply Chain Resilience

Ports worldwide are evolving into intelligent hubs using automation, robotics, and real-time analytics to boost cargo handling efficiency and reduce vessel turnaround times by up to 40%.



## Rise of Coastal and Short-Sea Shipping

Increasing congestion and environmental pressures are stimulating growth in regional short-sea shipping routes across Asia and Europe, supported by investment in specialized smaller vessels and eco-friendly ports.



## Emerging Technologies on the Horizon

Autonomous underwater vehicles and 5G-enabled remote ship operations will enhance safety, reduce downtime, and offer new opportunities in crew training through augmented reality, reshaping maritime operations by decade's end.



## Cybersecurity Becomes Critical

With digitalization increasing, cyber threats are a rising concern. Shipping companies are investing heavily in cybersecurity frameworks to protect sensitive operational data and avoid costly breaches.



## Geopolitical Disruptions Shape Trade Flows

Ongoing trade tensions and new regulations force shipping companies to diversify routes and adopt more agile operational strategies.



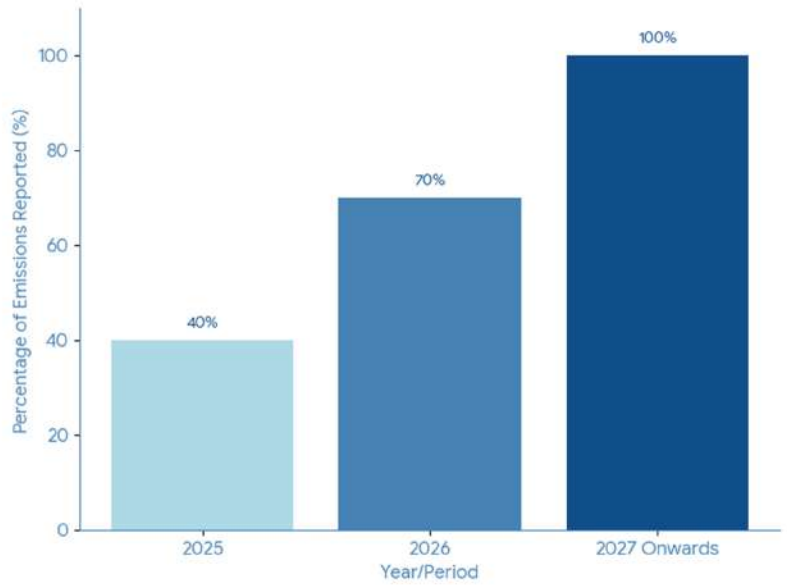


# REDUCING EMISSIONS FROM THE SHIPPING SECTOR

International shipping accounted for 1.4% of global greenhouse gas emissions in 2024, with vessels collectively emitting over 1 billion metric tons of CO<sub>2</sub> equivalent per year, according to data from Clarkson Research Services Ltd.

Under the EU Emissions Trading System (ETS), shipping companies must purchase and surrender emission allowances for each tonne of reported CO<sub>2</sub> (or CO<sub>2</sub> equivalent) emitted within the system's scope. The administering authorities of EU Member States are responsible for ensuring compliance through regulations similar to those applied to other ETS sectors.

To facilitate a smooth transition, the system introduces a phase-in period during which operators will only surrender allowances for a portion of their emissions:





The first compliance deadline falls in September 2025, covering emissions recorded between 1 January 2024 and 31 December 2024.



Moreover, a reporting and review clause has been included to assess progress and align with evolving measures set by the International Maritime Organization (IMO). This continuous monitoring ensures that the maritime sector remains on track with global sustainability goals.



Shipping's role in shaping a low-carbon future goes beyond compliance—it marks the beginning of a transformative era where efficiency, innovation, and environmental accountability redefine what it means to operate responsibly at sea.





# Are alternative future shipping fuels economically viable?

The shipping industry is meticulously striving towards minimizing atmospheric pollution. As the future will rely heavily on sustainability of our planet and ecosystem, ship operators are rethinking their fuel policies.

Since there are strong regulations from the International Maritime Organization (IMO) about environmental mandates and efficient energy usage, operators are seeking fuel-based solutions that reflect standards to maintain environmental integrity.

Since 84% of the international shipping fleet continues to run on fossil fuels, IMO is targeting a 20-30% minimization of carbon emissions by 2030. While only 16% of on order vessels are capable of alternative fuels today, there is a slow but even transition towards cleaner fuels.

As a shipping operator, you are required to understand the policy shifts that are underway so that you are not caught unaware or left frustrated due to these reforms.



# Which alternative fuels are more sustainable?

**Methanol:** Methanol is quickly emerging as a leading option among alternative fuels. Top influential shipping companies such as Maersk, CGM and COSCO have already made big investments in the development of methanol capable fleets. Methanol is easier to handle since it remains in its liquid state at room temperature.

**Ammonia:** Ammonia does not produce any CO<sub>2</sub> and can be manufactured from hydrogen and nitrogen available in the air but it has a major disadvantage. Ammonia is toxic and corrosive and requires entirely new safety standards that could eat into your budgets.

**LNG:** LNG remains as the top contender among alternative fuels but its reliance on fossil gas weakens its long-term credibility. Even though LNG offers policy compliances, its higher upfront costs create risks among your assets.

Even though these are alternative fuels that could deliver you policy compliance, they have their advantages and disadvantages. If you're in the process of transitioning to an alternative fuel you must ensure that your choice of fuel must be compliant to regulations, is profitable, environmental-friendly and also easier to handle through the supply chain.



# Panama Canal Transits Surge in FY2025 after a formidable drought

The Panama Canal which is a vital intersection for international commerce and trade fell into a major crisis period during the FY2023-24 due to a severe drought. Authorities had no choice but to impose transit restrictions due to the severe water shortage.

The global supply chain fell into a turbulent setback because of vessel delays and rerouting that were caused due to these restrictions.

Signs of recovery came about in FY2025 where the Panama Canal saw a 19.3% jump in transits compared to 11,240 transits during the drought-stricken phase.

Restoration of normal transit capacity has led to the stabilization of freight rates and reduced insurance rates for shipments transiting the canal.

Since the number of vessels that could access the waterway has increased since the drought, major shipment carriers have resumed operations through the canal leading to a 14.4% increase in total revenue since the drought period.

With a total revenue of \$5.7billion in the FY2025, the canal's financial and operational strength has again proved that its management systems remain efficient despite underlying issues that caused disruptions in the shipping industry.

# What does the future hold?

The drought crisis has been a wake-up call for the canal authorities which has prompted a quick response in water conservation and projects related to climate adaptation.

The shipping sector which relied on alternative routes during the drought have heaved a sigh of relief as they no longer have to incur additional charges or deal with logistical congestions that remained a grave concern for effective maritime operations.

Since climate or environmental shifts are uncertain, events such as these demonstrate that the global shipping trade must be ready to face challenges and disruptions so that a more resilient and sustainable future can be established across important maritime corridors.





# Saving Smarter, Operating Better: Mizzen Digital's Impact on Your Bottom Line

In today's competitive shipping and trading environment, companies are under constant pressure to optimize costs while improving operational efficiency. Mizzen Digital is designed to create measurable value from day one, ensuring that the platform not only justifies its cost but in fact pays for itself in the short run.

One of the keyways Mizzen Digital achieves this is through negotiation-driven savings. By providing clients with clear visibility on market trends, historical benchmarks, and counterpart insights, the platform empowers commercial managers and operators to negotiate with greater confidence and precision.

Even a small percentage improvement in negotiated rates, whether in port costs, agency fees, or stores/bunker arrangements can translate into substantial savings across a company's voyage portfolio. For many clients, these early-stage savings alone are enough to offset the platform's subscription cost, effectively making Mizzen Digital self-funding.

This feature is not just about lowering costs it's about strengthening decision-making. With data-backed support, clients reduce exposure to unfavourable terms, eliminate inefficiencies, and consistently capture better value in their commercial dealings.

**In short, Mizzen Digital ensures that every negotiation is informed, every decision is optimized, and every dollar saved helps the system pay for itself right from the start.**

# What's New

## Mizzen Digital gets the BIMCO & TRACE Certifications

A testament to our unwavering commitment to global maritime standards and compliance. Securing the BIMCO license places us among the industry's trusted solution providers, recognized for upholding best practices and fostering transparent, efficient maritime operations.

The TRACE certification amplifies our promise of ethical business conduct and robust anti-bribery efforts, enabling our clients and partners to operate with more confidence and integrity.

These milestones strengthen Mizzen Digital's reputation as a secure, compliant, and forward-thinking leader in maritime technology.



Compliance Powered by Community



# Life at Mizzen Digital

All Work and no play? Not at Mizzen Digital!

At Mizzen Digital, we are all about building stronger connections, with engaging team bonding activities that bring together fresh ideas and plenty of laughter.



# Employee Spotlight

## My Journey at Mizzen Digital – From Intern to Software Developer

“I began my journey with Mizzen Digital in September 2024 as an intern while pursuing my third year of B.Tech. What drew me in was the company’s forward-thinking vision to bring digital transformation to the maritime industry and its energetic startup culture that values innovation and learning.

When I joined, I had no prior experience in Angular, yet with consistent support from my mentors and teammates, I was able to learn quickly and successfully deliver the Report Module, along with contributing to the Lay Time Calculation Module. This experience taught me how much can be achieved through collaboration, curiosity, and persistence.

On October 1, 2025, I stepped into the role of Software Developer — a moment that marked both personal and professional growth. Mizzen’s open culture, trust-driven environment, and willingness to nurture talent have played a huge part in my development.

I’ve learned that great things happen when people work together with shared purpose and mutual trust. That belief has been at the heart of my journey here.

I’m grateful to everyone at Mizzen Digital for their guidance, encouragement, and belief in me. I look forward to continuing this journey of learning, building, and growing together.”





# Making Waves for Good

Building better systems means building better communities. Here is how we showed up for both.

This festive season, our team at Mizzen Digital partnered with the Muskan Foundation, an NGO dedicated to uplifting children with disabilities. What started as a simple visit turned into a morning of shared learning, celebration, and heartwarming connection. We joined in their Ganesh Utsav festivities, sang songs, and were welcomed with enthusiastic smiles and creativity at every art table. Supporting Muskan's inspiring mission, we found ourselves inspired by the spirit of resilience and hope. At Mizzen Digital, we believe that real progress is measured not just in technology, but in the connections we nurture and the joy we create by showing up for one another.





We don't just  
**tackle problems.**  
we **chart new waters.**

At Mizzen Digital,  
we solve challenges that  
others shy away from.  
**What's yours?**

Contact us to  
know more

## Contact us

Headquarters (India) address :  
C-1 (A), Bagwe Bhavan, Jayprakash  
Nagar, Rd No. 1, Goregaon East,  
Mumbai 400063, Maharashtra,  
India.  
Phone no.: +91-22-35227425  
E-mail ID: [enquire@mizzendigital.com](mailto:enquire@mizzendigital.com)

## Follow us



Scan now to  
Visit our website

